

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023691**Date Inspected:** 12-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Sun Tian Liang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

OBG Trail Assembly

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) welding of weld joint SA3122-001~014-007, 008, 010 and 011 located on bottom plate connected SA3122 at panel point 121 to 121.5 FL2 side of OBG Segment 13BW. ZPMC Welder is identified as 066695. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

FCAW welding of weld joint SA3123-001~004-001, 002 007 and 008 located on bottom plate connected SA3122 at panel point 121 to 121.5 FL2 side of OBG Segment 13BW. ZPMC Welder is identified as 066695. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

FCAW welding of weld joint SEG3015D-265 located on deck panel diaphragm to floor beam at panel point 124.5 of OBG Segment 13CW. ZPMC Welder is identified as 066687. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-FCAW-3G-(3F)-ESAB-Repair-1, which is used as per Welding Repair Report (WRR) B-WRR-20928.

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FCAW welding of weld joint SEG3014S-002, 005, 008, 011, 014, 017 and 020 located on vertical RS stiffener to floor beam at panel point 122 of OBG Segment 13BW. ZPMC Welder is identified as 045143. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

Shielded Metal Arc Welding (SMAW) welding of weld joint SEG3015H-234, 238, 242, 246, 250, 254 and 258 located on vertical plate RS stiffener to floor beam at panel point 123 of OBG Segment 13CW. ZPMC Welder is identified as 067588. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3015E-264, 268, 272, 276, 280 and 284 located on vertical plate RS stiffener to floor beam at panel point 123.5 of OBG Segment 13CW. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint OBW13D-004 located on side plate to side plate of OBG Segment 13AW to OBG Segment 13BW at cross beam side. ZPMC Welders are identified as 045196 and 045246. ZPMC Quality Control (QC) is identified as Mr. Zhou Peng. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-B-U2a-FCM-1.

SMAW welding of weld joint OBW13E-003 located on side plate to side plate of OBG Segment 13AW to OBG Segment 13BW at counter weight side. ZPMC Welder is identified as 066361. ZPMC Quality Control (QC) is identified as Mr. Zhou Peng. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-B-U2a-FCM-1.

FCAW welding of weld joint OBW13-003 located on edge plate to edge plate of OBG Segment 13AW to OBG Segment 13BW at cross beam side. ZPMC Welder is identified as 066734. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-ESAB.

Description of Incident: During random Quality Assurance Visual in-process inspection of welds located on segment 13CW, this Quality Assurance Inspector (QA) observed that ZPMC personnel performed flame cutting on floor beam to deck panel diaphragm weld at Counter Weight Side. Prior to weld cutting ZPMC QC informed to inspection engineer. The floor Beam number is identified as FB3237A and the panel point is identified as 124.5. This weld is a Fillet weld joining the Floor beam Web to Deck panel diaphragm. The gape of this weld measured approximately 25mm. So ZPMC has to be converted fillet weld to CJP weld and the Floor Beam Flange weld is identified as Non SPCM. For further information, please see the attached pictures.

general compliance with the applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By: Kumar,Vibin

Quality Assurance Inspector

Reviewed By: Patel,Hiranch

QA Reviewer